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10/510,680 Youg Chu, 9-20-2006

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NEWS 3
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         FEB 27
NEWS 4 MAY 10 CA/Caplus enhanced with 1900-1906 U.S. patent records
NEWS 5 MAY 11 KOREAPAT updates resume
                 Derwent World Patents Index to be reloaded and enhanced
NEWS 6 MAY 19
NEWS 7 MAY 30
                 IPC 8 Rolled-up Core codes added to CA/CAplus and
                 USPATFULL/USPAT2
      8
         MAY 30
                 The F-Term thesaurus is now available in CA/CAplus
NEWS
                 The first reclassification of IPC codes now complete in
NEWS
      9
         JUN 02
                 INPADOC
         JUN 26
                 TULSA/TULSA2 reloaded and enhanced with new search and
NEWS 10
                 and display fields
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                 Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 12
         JUl 11
                 CHEMSAFE reloaded and enhanced
         JUl 14 FSTA enhanced with Japanese patents
NEWS 13
                 Coverage of Research Disclosure reinstated in DWPI
NEWS 14 JUl 19
NEWS 15 AUG 09 INSPEC enhanced with 1898-1968 archive
                 ADISCTI Reloaded and Enhanced
NEWS 16
        AUG 28
NEWS 17
         AUG 30
                 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 18
         SEP 11
                 CA/CAplus enhanced with more pre-1907 records
              JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.
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              X.25 communication option no longer available
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specific topic.
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FILE 'HOME' ENTERED AT 15:30:45 ON 20 SEP 2006

=> file req SINCE FILE TOTAL COST IN U.S. DOLLARS ENTRY SESSION FULL ESTIMATED COST 0.21 0.21 CM 2

CRN 71-47-6 CMF C H O2

O== CH- O-

=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 6.03 521.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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Typloading C:\Documents and Settings\ychu\Desktop\Case\10510680\10510680F.str

L16 STRUCTURE UPLOADED

=> d L16 HAS NO ANSWERS L16 STR

G1 0,S

Structure attributes must be viewed using STN Express query preparation.

=> s 116

SAMPLE SEARCH INITIATED 15:40:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1005 TO ITERATE

100.0% PROCESSED 1005 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 18199 TO 22001

PROJECTED ANSWERS: 3 TO 163

L17 3 SEA SSS SAM L16

=> s l16 full

FULL SEARCH INITIATED 15:40:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 19091 TO ITERATE

100.0% PROCESSED 19091 ITERATIONS 55 ANSWERS

SEARCH TIME: 00.00.01

L18 55 SEA SSS FUL L16

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 167.38 689.24

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$$R^2$$
 $R^1$ 
 $R^3$ 
 $C(CH_2)_{n}$ 
 $R^4$ 
 $R^5$ 
 $R^6$ 
 $Z-W-R$ 
 $I$ 

Title muscarinic receptor antagonists I (X = O, NH, etc.; R1 = OH, etc.; R2 = H, halo, alkyl; R3 = H, OH, etc.; R4, R5, R6 = H, alkyl; ; Z = CH2, SO2, carbonyl; W = alkylene, etc.; R = alkyl, aryl, etc.), useful for the treatment of various diseases of the respiratory, urinary and gastrointestinal systems mediated through muscarinic receptors, are prepd. The affinity of these compds. for M2 and M3 muscarinic receptor subtype was tested. For example, (3S)-1-benzylpyrrolidin-3-yl cyclopentyl(hydroxy)phenylacetate was prepd. and had pKi = 6.13/7.17 for the M2 and M3 receptor subtype resp.

TT 719278-65-6P 719278-66-7P 719278-72-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-substituted-3-pyrrolidine derivs. as muscarinic receptor antagonists)

RN 719278-65-6 CAPLUS

Absolute stereochemistry.

RN 719278-66-7 CAPLUS

Absolute stereochemistry.

RN 719278-72-5 CAPLUS

## Absolute stereochemistry.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

Current application

ACCESSION NUMBER: DOCUMENT NUMBER:

2003:837081 CAPLUS 139:337885

TITLE:

Preparation of acyloxypyrrolidinium salts as M3

muscarinic antagonists

INVENTOR(S):

Prat Quinones, Maria; Fernandez Forner, Maria Dolors

Almirall Prodesfarma S.A., Spain

SOURCE:

PCT Int. Appl., 72 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

P									APPLICATION NO.								
	WO 2003087094			A2 20031023		WO 2003-EP3786											
W	WO 2003087094			<b>A</b> 3	A3 20040318												
	W :	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
											KG,						
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
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A	AU 2003233967			A1 20031027			AU 2003-233967				20030411						
E	EP 1497284 A2 20050119			0119	EP 2003-727294				20030411								
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								US 2005-510680									
	PRIORITY APPLN. INFO.:										002-					0020	416
											003-					0030	
		_ 4 _ 4							`								

OTHER SOURCE(S):

MARPAT 139:337885

GI

$$R-(CH_2)_n-A-(CH_2)_m-N$$
 $X^-$ 
I

$$O_2C$$
 $O_2C$ 
 $O_3-N$ 
 $O_2C$ 
 $O_1$ 
 $O_1$ 
 $O_2C$ 
 $O_1$ 
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 $O_1$ 
 $O_$ 

Pyrrolidinium derivs. I [R = (un)substituted Ph, naphthalenyl, 5,6,7,8-tetrahydronaphthalenyl, benzo[1,3]dioxolyl, biphenyl, heteroarom.; R1 = alkyl; R2 = CR3R4R5, Q; R3 = 2-furyl, 3-furyl, 2-thienyl, 3-thienyl; R4 = 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, cycloalkyl; R5 = H, OH, Me, CH2OH; Q1 = CH2, CH2CH2, O, OCH2, S, SCH2, CH:CH; A = (un)substituted CH:CH, CH2, CO, O, S, S(O), SO2, NH; m = 0-8; n = 0-4] were prepd. for use in therapy as antagonists of M3 muscarinic receptors (no data). Thus, (3R)-3-pyrrolidinol was treated with 2-(3-bromopropyl)thiophene to give (3R)-1-(3-thien-2-ylpropyl)pyrrolidinol which was treated with Me 2-hydroxy-2,2-dithen-2-ylacetate and quaternized to give the pyrrolidinium salt II.

II

IT 616865-64-6P 616865-65-7P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of acyloxypyrrolidinium salts as M3 muscarinic antagonists)

RN 616865-64-6 CAPLUS

CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(3-phenoxypropyl)-, bromide, (1S,3R)- (9CI) (CA INDEX NAME)

RN 616865-65-7 CAPLUS
CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(3-phenoxypropyl)-, bromide, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Br-

Absolute stereochemistry.

CM 1

CRN 616866-05-8 CMF C22 H23 N O4 S2

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 616866-07-0 CAPLUS

CN 2-Thiopheneacetic acid, .alpha.-hydroxy-.alpha.-2-thienyl-, (3R)-1-(3-phenoxypropyl)-3-pyrrolidinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 616866-08-1 CAPLUS

CN 2-Thiopheneacetic acid, .alpha.-hydroxy-.alpha.-2-thienyl-, (3R)-1-(3-phenoxypropyl)-3-pyrrolidinyl ester, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 616866-07-0 CMF C23 H25 N O4 S2

Absolute stereochemistry.

CM 2

CRN 144-62-7 CMF C2 H2 O4

IT 616865-58-8P 616865-59-9P 616865-60-2P 616865-62-4P 616865-63-5P 616865-76-0P 616865-77-1P 616865-78-2P 616865-86-2P

Absolute stereochemistry.

#### ● Br-

RN 616865-59-9 CAPLUS
CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(2-phenoxyethyl)-, bromide, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### ● Br -

RN 616865-60-2 CAPLUS
CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(2-phenoxyethyl)-, bromide, (1S,3R)- (9CI) (CA INDEX NAME)

### • Br

RN 616865-62-4 CAPLUS
CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(3-phenoxypropyl)-, bromide (9CI) (CA INDEX NAME)

### • Br-

RN 616865-63-5 CAPLUS
CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-methyl-1-(3-phenoxypropyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# • Br-

RN 616865-76-0 CAPLUS

CN Pyrrolidinium, 3-[(cyclohexyl-2-furanylhydroxyacetyl)oxy]-1-methyl-1-[2-(phenylmethoxy)ethyl]-, bromide, (3R)- (9CI) (CA INDEX NAME)

# • Br-

RN 616865-77-1 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[2-(phenylmethoxy)ethyl]-, bromide, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## • Br-

RN 616865-78-2 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[2-(phenylmethoxy)ethyl]-, bromide, (1S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# • Br-

RN 616865-86-2 CAPLUS

CN Pyrrolidinium, 1-[3-(2-benzothiazolyloxy)propyl]-3-[[(2R)-cyclohexyl-2furanylhydroxyacetyl]oxy]-1-methyl-, chloride, (3R)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & Me \\
 & N \\
 & O \\$$

• c1-

RN 616865-87-3 CAPLUS

CN Pyrrolidinium, 1-[3-(2-benzothiazolyloxy)propyl]-3-[[(2S)-cyclohexyl-2furanylhydroxyacetyl]oxy]-1-methyl-, chloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ &$$

• c1-

RN 616865-88-4 CAPLUS

CN Pyrrolidinium, 1-[3-(2-benzothiazolyloxy)propyl]-3-[(cyclohexyl-2-furanylhydroxyacetyl)oxy]-1-methyl-, chloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c}
 & Me \\
\hline
 & N \\
\hline
 & O \\
 & O \\
\hline
 & O \\
 & O \\
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 & O \\
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● Cl -

RN 616865-89-5 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclohexyl-2-furanylhydroxyacetyl]oxy]-1-ethyl-1-

[3-(phenylthio)propyl]-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br

RN 616865-90-8 CAPLUS

CN Pyrrolidinium, 3-[[(2S)-cyclohexyl-2-furanylhydroxyacetyl]oxy]-1-ethyl-1-[3-(phenylthio)propyl]-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Br -

RN 616865-91-9 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[3-(phenylthio)propyl]-, bromide, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Br-

RN 616865-92-0 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[3-(phenylthio)propyl]-, bromide, (1S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 616865-93-1 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[3-[(5,6,7,8-tetrahydro-2-naphthalenyl)oxy]propyl]-, bromide, (1S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Br-

RN 616865-94-2 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-methyl-1-[3-[(5,6,7,8-tetrahydro-2-naphthalenyl)oxy]propyl]-, bromide, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 616865-95-3 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-[3-(4-methoxyphenoxy)propyl]-1-methyl-, bromide, (3R)- (9CI) (CA INDEX NAME)

• Br

RN 616865-96-4 CAPLUS

CN Pyrrolidinium, 3-[[(2R)-cyclopentylhydroxyphenylacetyl]oxy]-1-[3-(4-methoxyphenoxy)propyl]-1-methyl-, bromide, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 616866-00-3 CAPLUS

CN Pyrrolidinium, 3-[(hydroxydi-2-thienylacetyl)oxy]-1-[3-(3-hydroxyphenoxy)propyl]-1-methyl-, (3S)-, formate (9CI) (CA INDEX NAME)

CM 1

CRN 616865-99-7 CMF C24 H28 N O5 S2

Absolute stereochemistry.

CM 2

CRN 71-47-6 CMF C H O2 RN 616866-02-5 CAPLUS
CN Pyrrolidinium, 1-[3-(3-cyanophenoxy)propyl]-3-[(cyclohexyl-2-furanylhydroxyacetyl)oxy]-1-methyl-, (3R)-, formate (9CI) (CA INDEX NAME)

CM 1

CRN 616866-01-4

Absolute stereochemistry.

C27 H35 N2 O5

CMF

CM 2

CRN 71-47-6 CMF C H O2

O== CH-O-

RN 616866-04-7 CAPLUS
CN Pyrrolidinium, 3-[(cyclohexyl-2-furanylhydroxyacetyl)oxy]-1-methyl-1-[3-(1-naphthalenyloxy)propyl]-, (3R)-, formate (9CI) (CA INDEX NAME)

CM 1

CRN 616866-03-6 CMF C30 H38 N O5

CRN 71-47-6 CMF C H O2

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L19 2 L18

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L19 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:546475 CAPLUS

DOCUMENT NUMBER:

141:106362

TITLE:

Preparation of 1-substituted-3-pyrrolidine derivatives

as muscarinic receptor antagonists

INVENTOR(S):

Mehta, Anita; Gupta, Jang Bahadur; Sarma, Pakala

Kumara Savithru

PATENT ASSIGNEE(S):

Ranbaxy Laboratories Limited, India

SOURCE:

GI

PCT Int. Appl., 47 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

102(e) overcame

by Certifized

WO 2004056767  A1 20040708  WO 2002-IB5590  20021223  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,	PA	ATENT NO.	IT NO.	KIND DATE	APPLICATION NO.	DATE translation				
<ul> <li>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,</li> </ul>										
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